# UNITED STATES PATENT AND TRADEMARK OFFICE

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/885,977 | 06/22/2001 | Doug Hytcheson | 01-40266-US (953267.20088 | 5275 |

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|---|---|

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| EXAMINER |
|---|
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| ART UNIT | PAPER NUMBER |
|---|---|
| 2684 | |

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/885,977 | HYTCHESON ET AL. |
| | Examiner | Art Unit | |
| | Alan T. Gantt | 2684 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>22 June 2001</u>.

2a)☐ This action is **FINAL**.    2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-34</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>34</u> is/are allowed.

6)☒ Claim(s) <u>1-5,7,8,10-13,15,16,18-22,28,30 and 33</u> is/are rejected.

7)☒ Claim(s) <u>6,9,14,17,23-27,29,31 and 32</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1.      The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

2.      Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Rautila.

Regarding claim 1, Rautila discloses a multiplayer game system using a mobile telephone

and a game unit.  The mobile phone may be linked to a base station and a game server wherein

the game across the network and base station to the mobile phones for play on the game units.

Thus, Rautila meets the following limitations:

a telecommunications network;

an application server in communication with said telecommunications network

or managing the global state information relative to all of the users participating in

the interactive application session; (col. 2, lines 42-48) and

at least one mobile client device in communication with said application

server over said telecommunications network for managing the local state

information for each of the one or more users. (col. 5, lines 9-13 and col. 4, lines 49-54)


Regarding claim 2, Rautila meets the limitation - The system of Claim 1, wherein said

telecommunications network comprises a wireless communications network, comprising at least one

base station, at least one base station controller, and at least one mobile switching center. (Figure 1 and

col. 3, line 49 to col. 4, line 2)


### *Claim Rejections - 35 USC § 103*

3.       The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains.  Patentability shall not be negatived by the
> manner in which the invention was made.

4.       Claims 30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim, in

view of Rautila.



        Regarding claim 30, Kim discloses a method for implementing a network game function using

a portable telephone that enables a plurality of users having portable telephones to play a game

simultaneously. Kim further discloses a system for managing state information related to an interactive

application to accommodate one or more users participating in an interactive application session,

wherein the state information comprises local state information specific to each of the one or more user's

unique view of the interactive application and global state information, as well as a method for

managing the transfer of state information for an interactive application for at least one mobile client

device over a telecommunications network the system comprising:

        structuring the state information for optimized delivery over the

        telecommunications network; (col. 1, line 56 to col. 2, line 7 – provides for the same display for

        all participating telephones after an entry by one phone user) and

transferring the state information over the telecommunications network. (col. 1, line 56 to

col. 2, line 7)

Kim is silent regarding a game server.

Rautila discloses a multiplayer game system using a mobile telephone and a game unit.

The mobile phone may be linked to a base station and a game server wherein the game across the

network and base station to the mobile phones for play on the game units.    Thus, Rautila meets

the following limitations:

a method for managing the transfer of state information for an interactive application

between at least one mobile client device and a game server over a telecommunications network.

(col. 2, lines 42-48)


Kim and Rautila are combinable because they share a common endeavor, namely, network

gaming, utilizing mobile telephones.  At the time of the applicant's invention it would have been

obvious to modify Kim to utilize a game server as done by Rautila so that a wider variety of gaming can

be performed b the network, as well as greater complexity.


Regarding claim 33, Rautila meets the limitation - The method of Claim 30, wherein the

telecommunications network comprises a wireless communications network. (col. 3, lines 43-47)


5.      Claims 3-5, 7, and 8 are  rejected under 35 U.S.C. 103(a) as being unpatentable over

Rautila, in view of Kim.

Regarding claim 3, Rautila suggests the limitation -The system of Claim 2, wherein said application server further comprises:

communication means for receiving the local state information from said at least one mobile client device; (col. 2, lines 42-48)

a server state manager for structuring the updated global state information for optimized delivery over said wireless communications network; (col. 2, lines 42-48 –it is logical to expect a sever manager to perform this task)

Kim suggests the following limitations:

global modeler for comparing the received local state information with the global state information and updating the global state information; (col. 3, lines 26-29 and 45-65)

wherein said communication means delivers the updated global state information to said at least one mobile client device. (col. 3, lines 26-29 and 45-65)

Regarding claim 4, Rautila suggests the limitation- The system of Claim 3, wherein said application server further comprises synchronization means for time synchronizing the updated global state information delivered to said at least one mobile client device over said wireless communications network. (col. 6, lines 36-59 – the one player that must act as a game master for the others is the suggestion)

Regarding claim 5, the examiner takes Official Notice that it is well known to provide

synchronization means by utilizing a system clock and that it would have been obvious for

Rautila to utilize a server system clock said synchronization means to provide a reference for

presenting the most timely and proper display.


Regarding claim 7, the Kim / Rautila suggests the limitation- the system of Claim 1,

wherein said at least one mobile client device further comprises:

a local modeler for comparing the local state information to the global state

information, wherein differences between the local state information and the global

state information comprise changed state information; ( Kim - col. 3, lines 26-29 and 45-65)

a client state manager for structuring the changed state information for

optimized delivery over said wireless communications network; (col. 3, lines 26-29 and 45-65)

and

communication means for delivering the: changed state information to said

application server over said wireless communications network. (col. 2, lines 42-48)


Regarding claim 8, Rautila suggests the limitation -The system of Claim 7, wherein said

at least one mobile client device further comprises synchronization means for time synchronizing

the changed state information delivered to said application server relative to the global state

information. (col. 6, lines 36-59 – the one player that must act as a game master for the others is

the suggestion)

6.        Claims 10-13, 15, 16, 18-22, and 28 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Kim, in view of Rautila.


        Regarding claim 10, Kim discloses a method for implementing a network game function using a

portable telephone that enables a plurality of users having portable telephones to play a game

simultaneously.  Kim suggests an interactive application server for managing global state information

related to an interactive application relative to local state information received from one or

more mobile client devices over a wireless communications network during an

interactive application session, comprising:

        communication means for receiving the local state information from each of

the one or more mobile client devices; (col. 3, lines 26-29 and 45-65)

        a global modeler for comparing the received local state information with the

global state information and updating the global state information; (col. 3, lines 26-29 and 45-65

        - Kim suggests this by the outcome of the same program on every display)

Kim is silent regarding a game server as well as a server state manager.

        Rautila discloses a multiplayer game system using a mobile telephone and a game unit.  The

mobile phone may be linked to a base station and a game server wherein the game across the network

and base station to the mobile phones for play on the game units.   Thus, Rautila meets the following

limitations:

        a server state manager for structuring the updated global state information for

optimized delivery over the wireless communications network. (col. 2, lines 42-48 –it is logical to

expect a sever manager to perform this task)

Kim and Rautila are combinable because they share a common endeavor, namely, network gaming, utilizing mobile telephones. At the time of the applicant's invention it would have been obvious to modify Kim to utilize a game server as done by Rautila so that a wider variety of gaming can be performed b the network, as well as greater complexity.

Regarding claim 11, Kim meets the limitation - The interactive application server of Claire 10, wherein said communication means delivers the updated global state information to each of the one or more mobile client devices. (col. 3, lines 26-29 and 45-65)

Regarding claim 12, Rautila suggests the limitation- The system of Claim 3, wherein said application server further comprises synchronization means for time synchronizing the updated global state information delivered to said at least one mobile client device over said wireless communications network. (col. 6, lines 36-59 – the one player that must act as a game master for the others is the suggestion)

Regarding claim 13, the examiner takes Official Notice that it is well known to provide synchronization means by utilizing a system clock and that it would have been obvious for Rautila to utilize a server system clock said synchronization means to provide a reference for presenting the most timely and proper display.

Regarding claim 15, Kim discloses a method for implementing a network game function using a portable telephone that enables a plurality of users having portable telephones to play a game simultaneously. A mobile client device for managing local state information related to an interactive application relative to global state information during an interactive application session between one or more users over a wireless communications network, comprising:

a local modeler for comparing the local state information to the global state information, wherein differences between the local state information and the global state information comprise changed state information; (col. 3, lines 26-29 and 45-65)

a client state manager for structuring the changed state information for optimized delivery over the wireless communications network; (col. 3, lines 26-29 and 45-65 and

Kim is silent regarding a game server as well as a server state manager.

Rautila discloses a multiplayer game system using a mobile telephone and a game unit. The mobile phone may be linked to a base station and a game server wherein the game across the network and base station to the mobile phones for play on the game units. Thus, Rautila meets the following limitations:

an interactive application relative to global state information maintained by an application server during an interactive application session between one or more users over a wireless communications network (col. 2, lines 42-48)

communication means for delivering the changed state information to the application server over the wireless communications network. (col. 2, lines 42-48)

Kim and Rautila are combinable because they share a common endeavor, namely, network

gaming, utilizing mobile telephones. At the time of the applicant's invention it would have been

obvious to modify Kim to utilize a game server as done by Rautila so that a wider variety of gaming can

be performed b the network, as well as greater complexity.


Regarding claim 16, Rautila suggests the limitation- The system of Claim 3, wherein said

application server further comprises synchronization means for time synchronizing the updated global

state information delivered to said at least one mobile client device over said wireless communications

network. (col. 6, lines 36-59 – the one player that must act as a game master for the others is the

suggestion)


Regarding claim 18, Kim meets the limitation- the mobile client device of Claim 15, further

comprising: memory means for storing the interactive application; and input/output means for

interfacing with the interactive application. (col. 3, lines 7-11)


Regarding claim 19, Kim meets the limitation- The mobile client device of Claim 18, wherein

said memory means is selected from the group consisting of: a memory chip, a plug-in module, solid

state memory, Sandisk memory media, and a memory stick. (col. 3, lines 7-11 - flash)


Regarding claim 20, Kim discloses a method for implementing a network game function using a

portable telephone that enables a plurality of users having portable telephones to play a game

simultaneously. Further, Kim suggests a method for managing state information related to an interactive

application to accommodate one or more users participating in an interactive application

session, wherein the state information comprises local state information specific to each of one or more

mobile client devices operated by the one or more users and global state information maintained at an

application server, the method comprising:

structuring the changed state information for optimized delivery over a

wireless communications network; (col. 3, lines 19-25)

delivering the changed state information to the application server over the

wireless communications network; (col. 3, lines 26-29 and 45-65) and

updating the global state information based on the changed state information

received from each of the mobile client devices. (col. 3, lines 45-65)

Kim is silent regarding comparing local and global information at each mobile client device.

Rautila discloses a multiplayer game system using a mobile telephone and a game unit. The

mobile phone may be linked to a base station and a game server wherein the game across the network

and base station to the mobile phones for play on the game units.    Thus, Rautila suggests the following

limitations:

comparing the local state information to the global state information at each of

the mobile client devices, wherein differences between the local state information

and the global state information comprise changed state information (col. 6, lines 1-25 – a

server is more likely to be able to handle the complexity of dealing with each device)

Kim and Rautila are combinable because they share a common endeavor, namely, network

gaming, utilizing mobile telephones. At the time of the applicant's invention it would have been

obvious to modify Kim to utilize a game server as done by Rautila so that a wider variety of gaming can

be performed b the network, as well as greater complexity.

Regarding claim 21, Rautila suggests the limitation- The system of Claim 3, wherein said

application server further comprises synchronization means for time synchronizing the updated global

state information delivered to said at least one mobile client device over said wireless communications

network. (col. 6, lines 36-59 – the one player that must act as a game master for the others is the

suggestion)

Regarding claim 22, Kim meets the limitations - The method of Claim 21 further comprising the

steps of:

> structuring the updated global state information for optimized delivery over the
>
> wireless communications network; (col. 3, lines 19-25) and
>
> delivering the updated global state information to each of the mobile client
>
> devices over the wireless communications network. (col. 3, lines 45-65)

Regarding claim 28, Rautila suggests the limitation- The system of Claim 3, wherein said

application server further comprises synchronization means for time synchronizing the updated global

state information delivered to said at least one mobile client device over said wireless communications

network. (col. 6, lines 36-59 – the one player that must act as a game master for the others is the

suggestion)

### *Allowable Subject Matter*

7.      Claim 34 is allowed.

8.      The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 34, a method of managing the transfer of state information for an

interactive application between one mobile client device maintaining local state of the interactive

application(local state information) and an interactive application server maintaining global state

of the interactive application information (global state information ) that includes determining

degrees of freedom corresponding to the changed local state information of the at least one

mobile client device and communicating to the interactive application server  the degrees of

freedom information was neither found, suggested, nor made evident by the prior art.


9.      Claims 6, 9, 14, 17, 23-27, 29, 31, and 32 are objected to as being dependent upon a

rejected base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

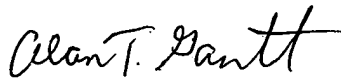The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 6, 9, 14, 17, 23, 26, 31, and 32, the use of changed state information based on degrees of freedom and their mapping as related to the interactive application was neither found, suggested, nor made evident by the prior art.

## *Conclusion*

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (703) 305-0077. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (703) 872-9306.

Any inquiry of a general nature or relating to this application should be directed to the group receptionist at telephone number (703) 305-4700.

Alan T. Gantt

September 18, 2004

NICK CORSARO
RIMARY EXAMINER